Paper No. 39

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVEN J. FRIEDMAN, GILLIAN FURSE, KAREN A. HARGROVE, JOSEPH M. JOY, NATHAN P. MYHRVOLD, SUNITA SHRIVASTAVA, and GIDEON A. YUVAL

Appeal No. 2000-0428
Application No. 08/667,291

ON BRIEF

Before RUGGIERO, BARRY, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 5-10, 14, 29, and 30, which are all the claims remaining in the application.

We reverse.

BACKGROUND

The invention is directed to method and apparatus for rendering a color image using a palette of colors having uniform luminance levels. Representative claim 5 is reproduced below.

5. Apparatus for rendering a color image in a computer, comprising:

a data structure stored in memory and containing sets of data defining a plurality of colors, a first set of data defining a plurality of gray colors located on a plurality of luminance levels within a color gamut, each luminance level consisting of colors of uniform luminance and having an area and vertices, and a second set of data defining a plurality of highly saturated colors located on the luminance levels; and

means for combining data from the sets of data to replace an original color of the color image in order to render the image.

The examiner relies on the following references:

Scott et al. (Scott) 4,009,527 Mar. 1, 1997

Stuart C. Wells et al. (Wells), Dithering for 12-Bit True-Color Graphics, IEEE Computer Graphics & Applications, pp. 18-29 (Sep. 1991).[1]

Claims 5-10, 14, 29, and 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Scott and Wells.

We refer to the Final Rejection (Paper No. 34) and the Examiner's Answer (Paper No. 38) for a statement of the examiner's position and to the Brief (Paper No. 37) for appellants' position with respect to the claims which stand rejected.

[1] The copy of record appears to be a reprint of an article in a paginated journal.

OPINION

Appellants assert (Brief at 6-7) that the rejection of claim 5 is in error because the references fail to teach or suggest the requirement of "a plurality of luminance levels within a color gamut, each luminance level consisting of colors of uniform luminance."

The statement of the rejection applied against claim 5 (Answer at 4-5) does not point out where Scott or Wells is deemed to teach the limitations in controversy. However, the examiner sets forth the position (Answer at 7-8) that Scott "does teach and/or suggest uniform luminance levels as claimed," pointing to text bridging columns 7 and 8 in the reference.

Appellants further argue (Brief at 6) that "[a] level of uniform luminance yields planes[2] 34 shown in Fig. 1 of the application which are not perpendicular to diagonal 49 through the cube 100."[3] The examiner responds (Answer at 8) that "the differences in angles may be the result of using different color spaces (Scott uses CMY while the present application shows RGB) and/or that Scott uses a scale based upon the percentage of color values rather that [sic; than] actual color values (column 5, lines 42-52)."

We find that Scott describes color charts resulting from diagonal planes progressing in tone "from light to dark." The progression corresponds "generally to the

[2] We note that the written description of appellants' specification (e.g., at 15-16) refers to luminance "levels" 34.

[3] Scott describes diagonal planes passed through color cube 100 (Fig. 1), which are perpendicular to diagonal line 110. Col. 5, ll. 60-62.

grey scale." The color chips on each chart (Fig. 4) are of "equal tint density," with each successive plane offering colors "darker in density." Col. 7, l. 62 - col. 8, l. 6.

The examiner argues (Answer at 7) that Scott's teaching of the progression corresponding "generally to the grey scale" means that each level is of "substantially the same" intensity or luminance. However, we note that claim 5 does not recite each luminance level consisting of colors of "substantially" uniform luminance. As disclosed and claimed, the instant invention requires colors having the same luminance with respect to each of the levels (34; Fig. 1).

Scott teaches planes of colors based on equal tint density. Although the planes described by Scott may generally correspond to the uniform luminance levels as claimed by appellants, we do not find suggestion in Scott for the requirements of claim 5 that appellants argue are missing from the references.

To the extent that the rejection may be based on a view that Scott inherently, although not expressly, describes planes consisting of colors of uniform luminance, we note that our reviewing court requires more than speculation.

> To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

The allocation of burdens requires that the USPTO produce the factual basis for its rejection of an application under 35 U.S.C. § § 102 and 103. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984) (citing In re Warner, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967)). The one who bears the initial burden of presenting a prima facie case of unpatentability is the examiner. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

We are persuaded by appellants that the evidence provided by Scott and Wells fails to establish prima facie obviousness of the subject matter of claim 5. The only other independent claim on appeal (claim 29) also requires uniform luminance levels. The examiner relies on the discussion with respect to claim 5 (see Answer at 10), which we have addressed. We thus do not sustain the rejection of claims 5-10, 14, 29, and 30 under 35 U.S.C. § 103 as being unpatentable over Scott and Wells.

CONCLUSION

The rejection of claims 5-10, 14, 29, and 30 under 35 U.S.C. § 103 is reversed.

REVERSED

JOSEPH F. RUGGIERO Administrative Patent Judge	)
LANCE LEONARD BARRY Administrative Patent Judge	) BOARD OF PATENT) APPEALS) AND) INTERFERENCES
HOWARD B. BLANKENSHIP Administrative Patent Judge	)

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